

U.S. ENVIRONMENTAL PROTECTION AGENCY
POLLUTION/SITUATION REPORT
Raritan Bay Slag Site - Remedial - Removal Polrep



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region II

Subject: POLREP #11
Progress
Raritan Bay Slag Site - Remedial
A205
Old Bridge, NJ
Latitude: 40.4543218 Longitude: -74.2381070

To: Peter Lopez, ORA
Angela Carpenter, ERRD
Dan Harkay, ERRD
Tanya Mitchell, ERRD
Stephanie Vaughn, ERRD
Michael Vanitallie, ORC

From: Andrew L. Confortini, OSC

Date: 10/31/2017

Reporting Period: October 23, 2017 through October 27, 2017

1. Introduction

1.1 Background

Site Number:	A205	Contract Number:	EP-S2-15-02
D.O. Number:	D.O.#47/#54	Action Memo Date:	
Response Authority:	CERCLA	Response Type:	
Response Lead:	EPA	Incident Category:	
NPL Status:	NPL	Operable Unit:	
Mobilization Date:	2/21/2017	Start Date:	2/21/2017
Demob Date:		Completion Date:	
CERCLIS ID:	NJN000206276	RCRIS ID:	
ERNS No.:		State Notification:	
FPN#:		Reimbursable Account #:	

1.1.1 Incident Category

On-going release of heavy metals into adjacent soil, wetlands and water. The source of the heavy metals are related to the waste created during the recovery of lead from used batteries. The waste is primarily in the form of slag and battery casings. This waste was used as fill in the Margaret's Creek portion of the Site. The presence of this waste has been confirmed and will be removed and disposed off-site. This work is being performed as a Remedial Action pursuant to the Record of Decision (ROD) for the Site.

1.1.2 Site Description

The Margaret's Creek Sector of the Raritan Bay Slag Site is approximately 47-acres of open space consisting of wetland and upland areas. Portions of the upland area is filled with slag and battery casings. The slag was brought to the Site approximately 50 years ago.

1.1.2.1 Location

The Margaret's Creek Sector of the Raritan Bay Slag Site is located between the Laurence Harbor and Cliffwood Beach sections of Old Bridge Township, Middlesex County, New Jersey.

1.1.2.2 Description of Threat

EPA has conducted multiple sampling events at the Site since 2008 under both the removal and remedial programs. The sampling activities included the collection of soil, sediment, water, and waste samples within the Margaret's Creek Sector. Analytical results generated by EPA indicate that significantly elevated levels of lead and other heavy metals are present in the soils and sediment. Analytical results for surface soil samples collected within the Margaret's Creek Sector were as high as: 78,000 mg/kg for lead. Representative samples of the excavated wastes generated during previous mitigation work have exceeded the Resource Conservation and Recovery Act Toxicity Characteristic Leaching Procedure limit for lead (5 mg/l).

1.1.3 Preliminary Remedial Assessment/Remedial Site Inspection Results

Information pertaining to the assessment and Site inspection results can be found in the Record of Decision (ROD) and the Final Design Analysis Report (DAR) for the Site, which are available through the Remedial Project Manager and website established for this Site.

2. Current Activities

2.1 Operations Section

2.1.1 Narrative

The overall approach to this Remedial Action is to remove crushed battery casings, slag and lead-contaminated soil to prevent the direct contact threat to the public and the migration of contaminated materials to adjacent wetlands, and public recreation areas.

As part of this approach, contaminated soil, slag, and debris is being excavated and stockpiled on a 30 mil HDPE impermeable liner. Stockpiled waste material are then screened to remove slag, rocks, and debris larger than 6-inches in size. The screening process results in two waste streams; 1)waste larger than 6-inches consisting primarily of slag and 2) waste less than 6-inches consisting primarily of soil, battery casings and smaller pieces of slag. Slag waste larger than 6-inches cannot be properly stabilized and must be crushed prior to treatment.

2.1.2 Response Actions to Date

Response actions completed prior to October 23, 2017 are described in previous POLREPs for the Site.

The following actions have been completed during this reporting period:

- * Response actions in support of the Remedial Action included delineation soil sampling events for the purpose of defining the horizontal and vertical extent of lead contamination in areas of concern (AOC) identified in the DAR.
- * On October 23, 24 and 25, 2017, 298.94 tons of slag hazardous waste (D004/D008) (>6-inches) was transported off-site for crushing, stabilization/treatment and disposal. On October 26, 2017, 188.47 tons of hazardous waste (<6-inches) was transported off-site for treatment and disposal. To date, a total of 10,291.345 tons of hazardous waste (<6-inches) and 316.4 tons of slag (>6-inches) has been transported off-site.
- * On October 23, 2017, excavation activities within AOC-A were initiated. Activities included the excavation of battery casings and soil beneath the 600-foot long Site access road through the Margaret's Creek Sector. On October 26, 2017, AOC-A excavation and backfilling activities were completed. Approximately 1,000-tons of waste was generated the mitigation of AOC-A.
- * On October 26, 2017, approval of 5,000-tons of bank run sand was granted by the RPM. Use of this material will require an amendment (i.e.-lime) to raise the pH to the 6 to 8 range.
- * Perimeter air monitoring, in accordance with the Community Air Monitoring Plan (CAMP), was conducted by Weston Solutions, Inc. Weekly air monitoring summary reports are being provided to EPA and maintained on-site. No significant air exceedances were reported during the work day monitoring periods.
- * On-site security services continued during non-working Site hours.
- * Personal air monitoring on contractor operators and laborers began on July 20, 2017 and is being conducted by Environmental Restoration, LLC (ER). ER is EPA's emergency and rapid response services (ERRS) contractor for this project. To date, the personal air monitoring results for lead have been below the site-specific action level of 30 microgram per cubic meter (ug/m³) of air. The OSHA permissible exposure level for lead is 50 ug/m³.
- * At this time, the project is estimated to be 50% complete.

2.1.3 Enforcement Activities, Identity of Potentially Responsible Parties (PRPs)

Enforcement activities are being managed by the Remedial Program.

2.1.4 Progress Metrics

Stabilization of the waste containing slag less than 6-inches in diameter is being conducted by Clean Earth of New Jersey, Kearny, NJ and transported to Grows North Landfill in Morrisville, PA for disposal. See Additional Sources of Information section for waste shipping and disposal information.

2.2 Planning Section

2.2.1 Anticipated activities for the next reporting period

2.2.1.1 Planned Response Activities

- * Continue perimeter air monitoring in accordance with the Community Air Monitoring Plan (CAMP).
- * Delivery of additional supplies.
- * Loading of slag waste for off-site crushing, stabilization/treatment and disposal.
- * Loading of soil and debris for stabilization/treatment and disposal.
- * Collection of post-excavation soil samples.
- * Complete an evaluation of all post-excavation and delineation soil sample results to insure site remediation goals have been met.
- * Disposal alternatives for the lead waste containing ACM have been provided to EPA. An off-site compliance check was completed and the facility is approved to accept this waste. Transportation off-site of this material is scheduled to begin during the next reporting period.

2.2.1.2 Next Steps

- * Preparation of the weekly air monitoring report.
- * Conducting the weekly progress meeting with the RPM.

2.2.2 Issues

- * The sequencing of excavation activities has deviated from the Design Analysis Report (DAR). Excavation work will proceed as follows: AOC H, E, U, V, W, S, Q, P, O, F, I, M, N, K, L/Y2, X1, X2, X3, Z and A.

- * On September 6, 20 representative soil samples of proposed topsoil material were collected at the EME facility located in New Egypt, NJ. If approved for on-site use by EPA, 3,000 tons of upland topsoil and 2,000 tons of wetlands topsoil will be delivered to the Site. If the topsoil is not approved for use, a replacement source will need to be identified and sampled. The analysis and analytical review timeframe is approximately 45-days from sample collection could delay final restoration of the Site.

- * Significant rainfall events may affect operations if the water level in Margaret's Creek rise and back up into the low-lying portions of the Site.

2.3 Logistics Section

2.4 Finance Section

2.4.1 Narrative

On September 9, 2016, \$7,000,000 was allocated to the regional Emergency & Rapid Response Services (ERRS) contract for this project. On February 6, 2017, an additional \$6,550,000 was added to the existing funding for the Remedial Action.

Funding for the Removal Support Team (RST) was allocated on October 27, 2016 (\$200,000) and February 6, 2017 (\$450,000).

Project costs shown below are as of October 26, 2017.

Estimated Costs *

	Budgeted	Total To Date	Remaining	% Remaining
Extramural Costs				
ERRS - Cleanup Contractor	\$13,550,000.00	\$2,326,610.18	\$11,223,389.82	82.83%
RST/START	\$650,000.00	\$300,756.32	\$349,243.68	53.73%
Intramural Costs				
Total Site Costs	\$14,200,000.00	\$2,627,366.50	\$11,572,633.50	81.50%

* The above accounting of expenditures is an estimate based on figures known to the OSC at the time this report was written. The OSC does not necessarily receive specific figures on final payments made to any contractor(s). Other financial data which the OSC must rely upon may not be entirely up-to-date. The cost accounting provided in this report does not necessarily represent an exact monetary figure which the government may include in any claim for cost recovery.

2.5 Other Command Staff

2.5.1 Safety Officer

None

2.5.2 Liaison Officer

None

2.5.3 Information Officer

None

3. Participating Entities

3.1 Unified Command

3.2 Cooperating Agencies

: New Jersey Department of Environmental Protection;
: Middlesex County Parks and Recreation;
: Middlesex County Mosquito Commission;
: Middlesex County Utilities Authority;
: Old Bridge Township Municipal Utilities Authority;
: Old Bridge Township Parks and Recreation.

4. Personnel On Site

EPA OSC

EPA RPM

ERRS Contractor (6-7 personnel)

RST 3 Contractor (1-2 personnel)

5. Definition of Terms

Not Applicable

6. Additional sources of information

6.1 Internet location of additional information/report

Not Applicable

6.2 Reporting Schedule

Not Applicable

6.3 Disposal Table

Waste Stream	Medium	Manifest #	Quantity (tons)	Treatment	Disposal Facility
Hazardous Waste	Soil/slag < 6"	017806063JJK	25.52	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806064JJK	26.41	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806065JJK	25.24	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806066JJK	26.55	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806038JJK	27.44	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806039JJK	27.93	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806040JJK	24.59	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806041JJK	25.97	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806042JJK	27.35	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806043JJK	25.61	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806044JJK	24.87	Stabilization	Landfill

Hazardous Waste	Soil/slag < 6"	017806482JJK	24.15	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806483JJK	23.92	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072532JJK	24.34	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072533JJK	25.07	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806485JJK	26.24	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072530JJK	23.88	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806484JJK	25.7	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072543JJK	26.39	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072542JJK	26.11	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072545JJK	26.97	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806486JJK	24.9	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072547JJK	23.14	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072546JJK	26.17	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017806487JJK	25.56	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072549JJK	24.59	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	018072548JJK	24.9	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	017580735JJK	23.91	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423716FLE	24.87	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423717FLE	23.1	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423718FLE	24.29	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423558FLE	24.47	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423552FLE	21.61	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423553FLE	26.16	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423554FLE	25.27	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423555FLE	22.93	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423556FLE	23.21	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423557FLE	23.24	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423559FLE	22	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423576FLE	24.41	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423560FLE	23.85	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423561FLE	22.77	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423562FLE	22.76	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423563FLE	22.42	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423564FLE	23.49	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423565FLE	23.56	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423566FLE	25.5	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423567FLE	22.66	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423568FLE	23.61	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423569FLE	25.46	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423663FLE	22.47	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423664FLE	25.72	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423791FLE	22.31	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423792FLE	23.99	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423793FLE	23.78	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423570FLE	24.89	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423571FLE	23.73	Stabilization	Landfill
Hazardous Waste	Soil/slag < 6"	010423572FLE	21.58	Stabilization	Landfill
Hazardous Waste	Slag > 6"	017580908JJK	17.56	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070598JJK	21.11	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070599JJK	23.91	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070605JJK	28.81	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070604JJK	27.88	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070602JJK	23.24	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070603JJK	25.05	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070600JJK	29.26	Stabilization	Landfill
Hazardous Waste	Slag > 6"	018070601JJK	27.5	Stabilization	Landfill
Hazardous Waste	Slag > 6"	017580999JJK	21.56	Stabilization	Landfill
Hazardous Waste	Slag > 6"	017580996JJK	22.27	Stabilization	Landfill
Hazardous Waste	Slag > 6"	017580998JJK	23.15	Stabilization	Landfill
Hazardous Waste	Slag > 6"	017580997JJK	25.1	Stabilization	Landfill
Total Tonnage			10623.385		

7. Situational Reference Materials

Not Applicable